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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,703	01/15/2004	Anthony M. Badalamenti	HES 2000-IP-001080U1D1	8082
28857	7590	07/08/2004	EXAMINER BOMAR, THOMAS S	
CRAIG W. RODDY HALLIBURTON ENERGY SERVICES P.O. BOX 1431 DUNCAN, OK 73536-0440			ART UNIT 3672	
PAPER NUMBER				

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/758,703

Applicant(s)

BADALAMENTI, ANTHONY M.

Examiner

Shane Bomar

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6, 8-11, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 7, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/15/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 6 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4,175,619 to Davis.

Regarding claims 6 and 11, Davis discloses an apparatus, and associated method for fabricating the apparatus, for limiting rotation of cementing plugs during drillout after cementing a casing in a wellbore, the apparatus and method comprising:

- Providing an outer sleeve 10 having upper and lower ends and an inner surface (see Fig. 3); and
- Affixing an inner sleeve 13 disposed in the outer sleeve, the inner sleeve being comprised of a durable compound with aggregate material dispersed therein (cement is known as a durable compound with aggregate material dispersed therein), wherein the inner sleeve will engage the cementing plug when it is received therein to limit rotation of the cementing plug during drillout of the cementing plug (see Figs. 3 and 5, and claim 1).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8, 9, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of US patent 6,708,768 to Slup et al.

Davis teaches the method and apparatus for limiting rotation of a cementing plug that includes an inner sleeve, as applied to claims 6 and 11 above. It is not taught that the inner sleeve is comprised of thermoplastic or urethane.

Slup et al teach a method and apparatus for limiting rotation of a cementing plug similar to that of Davis (see col. 10, lines 3-12). It is further taught that the inner sleeve 4 may be comprised of thermoplastic material, or urethane (see col. 18, lines 4-31). It would have been obvious to one of ordinary skill in the art, having the teachings of Davis and Slup et al before him at the time the invention was made, to modify the inner sleeve taught by Davis to include the thermoplastic material of Slup et al, in order to obtain a composite inner sleeve. One would have been motivated to make such a combination since Slup et al have shown that it was notoriously known in the downhole plug anti-rotation art to make components of the apparatus from thermoplastic materials since they exhibit high strength yet are easily drillable.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of US patent 3,332,499 to Harris et al.

Davis teaches the apparatus for limiting rotation of a cementing plug that includes an inner sleeve comprised of a durable compound, as applied to claim 6 above. It is not specifically taught that the aggregate material is selected from the group consisting of sand, gravel, nut hulls, fiberglass, and combinations thereof.

Harris et al teach a casing shoe similar to that of Davis (See Fig. 4). It is further taught that the inner sleeve 40 is made of a durable compound that has sand or gravel dispersed therein, since concrete is notoriously known to have these aggregates as a component (see col. 3, line 73 through col. 4, line 5). It would have been obvious to one of ordinary skill in the art, having the teachings of Davis and Harris et al before him at the time the invention was made, to modify the inner sleeve taught by Davis to include the sand and/or gravel aggregate material of Harris et al. One would have been motivated to make such a combination in order to obtain a concrete inner sleeve that was shown by Harris et al to be notoriously known in the art.

#### *Allowable Subject Matter*

6. Claims 1-5 are allowed, since the prior art of record fails to disclose or teach spraying a durable compound on an inner surface of the casing above float equipment, as is currently claimed.

7. Claims 7, 12, and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hartel et al teach spraying a thermoplastic material on the outside of tubing to form a sleeve. Szarka teaches a float valve made out of thermoplastic material.

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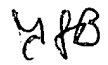
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 703-305-4849. The examiner can normally be reached on Monday - Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David J. Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

tsb

  
June 30, 2004